

A new species of the leleupidiine genus *Colasidia* Basilewsky from New Guinea

(Insecta, Coleoptera, Carabidae, Zuphiinae)*

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Colasidia garainae, spec. nov. from central Papua New Guinea is described. This fourth New Guinean species of *Colasidia* is most similar to *C. madang* Darlington, but is distinguished by even smaller eyes and longer and narrower elytra. A determination key and a distribution map of the recorded Australian-New Guinean species of the genus *Colasidia* are added.

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Introduction

The leleupidiine genus *Colasidia* is distributed from the southern part of the Malay Peninsula through Sumatra, northern Borneo, Papua New Guinea to northeastern Australia (Baehr 1997). Within this large area there are some striking gaps from where no records are available so far. It is uncertain, however, whether these gaps are caused by insufficient sampling, whether they reflect actual distribution gaps. Solving of this question is difficult, because leleupidiine beetles everywhere seem to be rare, perhaps due to their life in soil litter, from where they are mainly caught by sieving or Berlese extraction. Hence, collectors who do not conduct regular sieving, almost invariably fail to find these beetles.

One of the mentioned apparent distribution gaps is Irian Jaya, the western part of the large island of New Guinea. Whereas in Papua New Guinea three species have been recorded from a rather limited area, even quite accurate recent sampling in several parts of Irian Jaya failed to yield any specimens of Leleupidiini. The more striking is the discovery of a fourth species in central Papua New Guinea through the efforts of A. Riedel that is described in this paper.

This paper is rendered a supplement to my most recent paper on the genus *Colasidia* (Baehr 1997). Measurements and technics were conducted in the same way as in that paper.

The holotype is presented to Zoologische Staatssammlung, München (ZSM), paratypes are kept in the working collection of the author at ZSM.

* Results of the entomological explorations of A. Riedel in New Guinea in 1998.

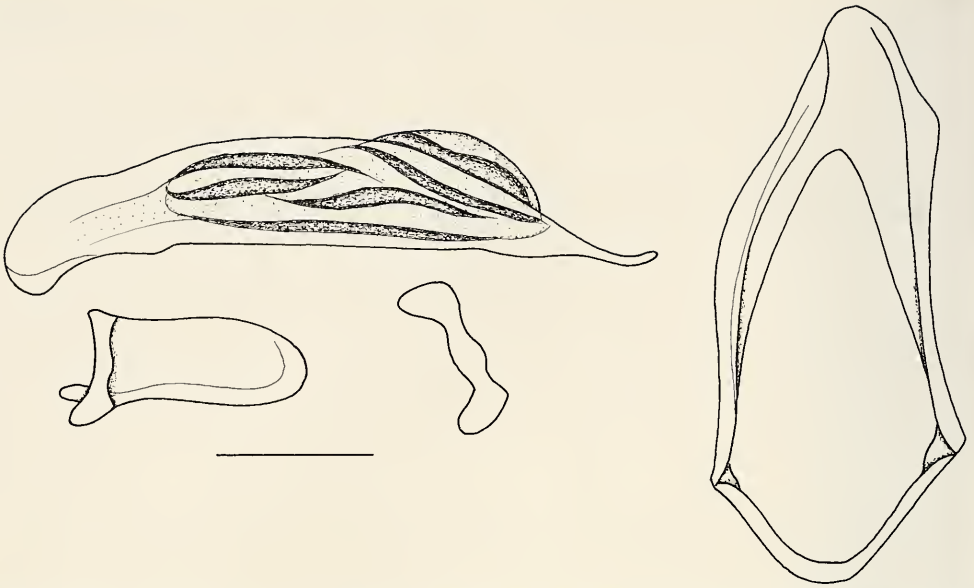


Fig. 1. *Colasidia garainae*, spec. nov. ♂ genitalia. Aedeagus (left side), left and right parameres, genital ring. Scale: 0.25 mm.

Key to the species of *Colasidia* Basilewsky from New Guinea and Australia

For the benefit of the user some figures from printed papers are mentioned in this key. **B87**: Baehr 1987; **B91**: Baehr 1991.

1. Head parallel, or wider across eyes than across orbits; base of head usually considerably rounded 2.
 - Head decidedly wider at posterior angles or across orbits than across eyes; base of head less rounded, more square 3.
2. Head short, eyes very large, orbits to neck $<1.5 \times$ as long as eyes; basal angles of head very widely rounded off (**B91** fig. 6); punctuation of elytra irregular, rather confused; odd intervals raised in anterior half; aedeagus unknown. Kokoda, central Papua Peninsula, eastern Papua New Guinea *kokodae* Baehr
 - Head longer, eyes smaller, orbit to neck c. $3 \times$ as long as eye; basal angles of head less widely rounded off; punctuation of elytra in regular rows; all intervals slightly raised along the whole of their length; aedeagus unknown. Dobodura, central Papua Peninsula, eastern Papua New Guinea *papua* Darlington
3. Eyes very small, orbit to neck $>5 \times$ as long as eye; head very elongate, usually markedly triangular (**B87** fig. 1). Northeastern Queensland, Australia *monteithi* Baehr
 - Eyes larger, orbit to neck $<4.5 \times$ as long as eye; head shorter, usually less markedly triangular. New Guinea 4.
4. Pronotum shorter and wider, ratio length/width c. 1.05; elytra shorter and wider, less depressed, ratio width of elytra/width of prothorax >2.05 , ratio length/width of elytra c. 1.40; aedeagus unknown. Damanti, Huon Peninsula, northern Papua New Guinea *madang* Darlington
 - Pronotum longer and narrower, ratio width/length >1.12 ; elytra longer and narrower, more depressed, ratio width of elytra/width of prothorax <1.90 , ratio length/width of elytra >1.48 ; aedeagus rather elongate, with elongate, at tip upturned apex (Fig. 1). Garaina, northwestern Papua Peninsula, eastern Papua New Guinea *garainae*, spec. nov.

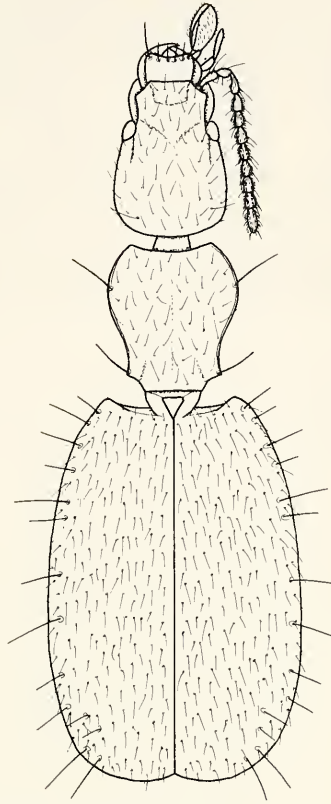


Fig. 2. *Colasidia garainae*, spec. nov. Habitus. Length: 4.2 mm.

Colasidia garainae, spec. nov.

Figs 1-3

Types. Holotype: ♂, Papua NG, Morobe-Pr., Saureri, 10 km s. Garaina, 1600-1700 m, 23.-24.3.1998, A. Riedel (ZSM). – Paratypes: 1♂, 1♀, same data (CBM).

Diagnosis. Medium-sized species with posteriorly widened, shortly rounded head, distinguished from most similar *Colasidia madang* Darlington by longer and narrower pronotum and elytra and by smaller eyes.

Description

Measurements. Length: 4.2-4.35 mm; width: 1.48-1.52 mm. Ratios. Length/width of head: 1.48-1.50; length orbit/eye: 4.35-4.45; length/width of pronotum: 1.13-1.18; width widest part/base of pronotum: 1.55-1.61; width pronotum/head: 1.18-1.19; length/width of elytra: 1.48-1.51; width elytra/pronotum: 1.87-1.89.

Colour. Dark piceous to almost blackish, suture of elytra very faintly lighter. Labrum, palpi, legs, and antennae yellowish.

Head. Large, rather elongate, somewhat quadrate, posteriorly slightly widened, widest far behind eyes at posterior third, just in front of orbital curvature. Orbit rather shortly rounded off. Upper surface gently convex. Frons on either side with a shallow, oblique groove. Eyes very small, depressed, length $< \frac{1}{4}$ of orbit length. Clypeus anteriorly almost straight, lateral angles (above base of antenna) slightly projecting. Clypeal seta far removed from apex, at apex on either side two hairs. Clypeal suture laterally with shallow grooves. Labrum anteriorly gently excised, 6-setose, though inner 4 setae slightly shorter, lateral margin pilose. Mandibles short. Mentum with wide, at apex slightly excised tooth.

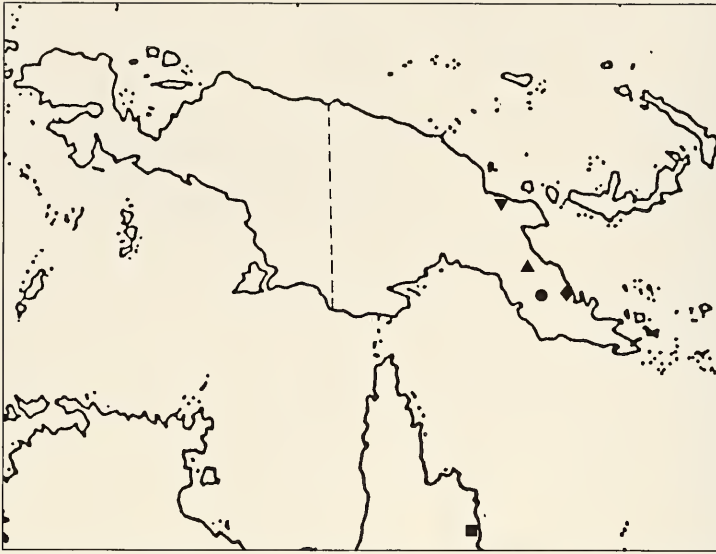


Fig. 3. Distribution of the Australian and New Guinean species of *Colasidia*. *C. monteithi* Baehr: ■; *C. kokodae* Baehr: ●; *C. papua* Darlington: ◆; *C. madang* Darlington: ▼; *C. garainae*, spec. nov.: ▲.

Labium truncate. Maxillary palpus elongate, apex obtusely rounded. Terminal segment of labial palpus large though comparatively short. Antenna short, just attaining the apical third of pronotum. Median antennomeres considerably wider than long, 3rd antennomere by far shorter than 1st, barely longer than 2nd antennomere. Surface glossy, with traces of microreticulation only on clypeus and anterior margin of frons. Puncturation fairly coarse, very sparse, distance between punctures c. 4-6× as wide as diameter of punctures, laterally distance slightly less. Pilosity very sparse, very elongate, hirsute, erect, inclined anteriorly. Both supraorbital setae barely recognizable within the elongate pilosity, posterior supraorbital setae situated far behind eye behind beginning of basal curvature.

Pronotum. Rather cordiform, slightly longer than wide, distinctly wider than head, widest in anterior third. Upper surface gently convex. Lateral margin strongly convex in anterior half, deeply sinuate in front of posterior angles, though straight and slightly oblique in basal third. Apex rather wide, slightly excised, anterior angles convex, rather projecting. Base wide, laterally excised, posterior angles projecting as small, acute denticles. Lateral margin slightly raised, with distinct border line, with rather wide marginal channel. Median line distinct, though rather shallow. Prebasal grooves moderately deep. Anterior marginal seta elongate, situated at anterior fourth of pronotum, posterior setae situated at basal angle. Surface without microreticulation, glossy, with rather sparse, coarse puncturation. Distance between punctures more than twice as wide than diameter of punctures. Pilosity rather sparse, moderately elongate, hirsute, irregularly inclined.

Elytra. Elongate, narrowly triangular, laterally weakly curved, widest in posterior fifth or quarter, upper surface rather depressed. Humeri wide, oblique, faintly projecting. Apex wide, gently convex, slightly oblique, not redressed to suture. Striae not recognizable. Puncturation fairly sparse, rather irregular, very coarse, becoming finer and sparser behind middle. Distance between punctures about as large or even slightly smaller than diameter of punctures. Fixed setae in third interval hardly recognizable within the coarse puncturation. Series of marginal pores very difficult to detect when setae broken, apparently consisting of 8 basal, 2 postmedian, 5 apical pores, and 1 pore at apex of 3rd stria. Setae very elongate. Surface without microreticulation, glossy. Pilosity rather sparse, moderately elongate, hirsute, irregular, inclined posteriorly, rather depressed.

♂ genitalia. Genital ring fairly narrow, rather parallel, apex wide, asymmetric. Aedeagus moderately elongate, with elongate, narrow, at tip distinctly upturned apex. Lower surface almost straight. Aedeagus very weakly sclerotized, therefore, no heavily sclerotized parts visible, though internal sac apparently bearing a somewhat coiled sclerite in middle. For parameres see fig. 1, left paramere rather elongate.

♀ genitalia. Stylomere 2 rather elongate with acute apex, with 2 elongate ventral ensiform seta the lower one being shorter, one elongate dorsal ensiform seta, and a nematiform seta arising from a large groove in apical third of median surface. Apex of stylomere 1 apparently asetose.

Variation. Very little variation noted.

Etymology. The name refers to the type locality.

Distribution. Northwestern Papua Peninsula, Papua New Guinea. Known only from type locality.

Collecting circumstances. Collected by sieving ground litter in rain forest at median altitude.

Remarks. This species is very similar and probably most closely related to *C. madang* Darlington though the actual relationships are unknown because the male genitalia of both Darlington's species (*C. madang*, *C. papua*) are yet unknown.

Acknowledgements

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References

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